

ABSTRACT OF THE DISCLOSURE

A substrate has a collector region of a first conductivity type, and a base layer of a single crystalline structure and including impurities of a second conductivity type is located over the collector region. An emitter region is defined at least in part by impurities of the first conductivity type contained in the base layer. An emitter electrode of the first conductivity type contacts the emitter region, and at least a portion of the emitter electrode which is in contact with the emitter region has a single crystalline structure.